a graft material defining two renal apertures each oriented to align with one of the two renal arteries when the stent-graft is in an expanded state; and

a stent system for supporting the graft material in a contracted state wherein each renal aperture is contracted and the expanded state wherein each renal aperture is expanded.

2. **(Cancelled)** The stent-graft of claim 1, wherein each renal aperture is substantially oval.

3. **(Cancelled)** The stent-graft of claim 1, wherein each renal aperture is at least as large as the orifice of the respective renal artery.

4. **(Cancelled)** The stent-graft of claim 1, wherein the two renal apertures are circumferentially separated by about 140 to 185 degrees.

5. **(Cancelled)** The stent-graft of claim 1, wherein the two renal apertures are longitudinally separated by about 0 to 2 cm.

6. The stent-graft of claim 1, wherein the stent system, when in the expanded state, is adapted to press against a portion of the aortic wall above the first renal artery and against a portion of the aortic wall above the second renal artery.

7. The stent-graft of claim 6, wherein the graft material defines a mesenteric aperture oriented to align with a superior mesenteric artery when the stent-graft is in an expanded state.

8. The stent-graft of claim 7, wherein the stent system supports the mesenteric aperture and when in the expanded state, is adapted to press against a portion of the aortic wall above the superior mesenteric artery.

9. The stent-graft of claim 8, wherein the graft material defines a celiac aperture oriented to align with a celiac axis artery when the stent-graft is in the expanded state.

10. The stent-graft of claim 9, wherein the stent system supports the celiac aperture and when in the expanded state, is adapted to press against a portion of the inner wall of the aorta above the celiac axis artery.

11. **(Cancelled)** The graft of claim 1, wherein the stent system is formed from a shape memory alloy.

12. **(Cancelled)** The graft of claim 11, wherein the shape memory alloy exhibits two-way shape change.

13. **(Cancelled)** The graft of claim 11, wherein the shape memory alloy exhibits one-way shape change.

14. The graft of claim 1, wherein the stent-graft further includes at least one stem and a leg attachable to the stem.

15. **(Cancelled)** The graft of claim 1, where the stent-graft includes two stems and two legs, each leg being attachable to one of the stems.

16. **(Cancelled)** A graft for bridging a defect in a main vessel disposed near one or more branch vessels extending from the main vessel, comprising:

a tubular member adapted for positioning against a wall of the main vessel above the one or more branch vessels; and

one or more apertures defined by the tubular member, each of the one or more apertures being alignable with at least one of the one or more branch vessels and having an area greater than the opening of the respective at least one branch vessel when the tubular member is positioned against the wall of the main vessel.

17. **(Cancelled)** The graft of claim 16, wherein the tubular member is adapted for positioning against the inner wall of the main vessel above one or more second branch vessels, the tubular member defining one or more second apertures each alignable with one of the second branch vessels.

18. **(Cancelled)** The graft of claim 16, wherein the tubular member includes a graft material defining the one or more aperture and a stent system supporting the graft material, wherein the stent system includes one or more supporting portions each surrounding at least part of the perimeter of at least one of the one or more apertures.

19. **(Amended)** A process of bridging a defect disposed in a main vessel near one or more branch vessels, comprising:

using three dimensional imaging, positioning [inserting], within the main vessel, a contracted graft [in a contracted state, the graft] having a sidewall defining one or more apertures;

using three dimensional imaging, aligning the graft within the main vessel such that each aperture aligns with at least a respective one of the branch vessels; and

expanding the graft to an expanded state wherein the one or more apertures are aligned with the one or more branch vessels and the graft presses against a wall of the main vessel.

20. **(Amended)** The process of claim 19, wherein aligning the graft includes partially expanding the graft and [aligning] rotating the graft while partially expanded about its longitudinal axis to align the one or more apertures in the sidewall of the graft with the one or more branch vessels.

21. **(Amended)** [The process of claim 20,] A process of bridging a defect disposed in a main vessel near one or more branch vessels, comprising:

inserting, within the main vessel, a graft in a contracted state, the graft defining one or more apertures;

aligning the graft within the main vessel such that each aperture aligns with at least a respective one of the branch vessels; and

expanding the graft to an expanded state wherein the one or more apertures are aligned with the one or more branch vessels and the graft presses against a wall of the main vessel;

wherein aligning the graft includes partially expanding the graft and aligning the graft while partially expanded;

wherein partially expanding the graft includes maintaining the graft in at least a partial martensite phase while forcibly expanding the graft.

~~22.~~ **(Amended)** [The process of claim 20,] A process of bridging a defect disposed in a main vessel near one or more branch vessels, comprising:

inserting, within the main vessel, a graft in a contracted state, the graft defining one or more apertures;

aligning the graft within the main vessel such that each aperture aligns with at least a respective one of the branch vessels; and

expanding the graft to an expanded state wherein the one or more apertures are aligned with the one or more branch vessels and the graft presses against a wall of the main vessel;

wherein aligning the graft includes partially expanding the graft and aligning the graft while partially expanded;

wherein partially expanding the graft includes heating the stent to a temperature between an austenite start temperature and an austenite finish temperature of the graft.

23. A process of manufacturing a graft for bridging a defect in a main vessel, the defect being disposed in the main vessel near one or more branch vessels extending from the main vessel, the process comprising:

developing a three dimensional image of an interior of the main vessel including the one or more branch vessels prior to inserting the graft in the main vessel; and

using the three dimensional image to form one or more apertures in the graft prior to inserting the graft within the main vessel, each aperture configured to align with a respective one of the one or more branch vessels.

24. **(Cancelled)** A graft for bridging a defect disposed in a main vessel near a branch vessel extending from the main vessel, the branch vessel being disposed between a first side of the main vessel in which the defect is disposed and a second side of the main vessel opposite the first side, the graft comprising:

a tubular member adapted for positioning against a wall portion of the main vessel on the second side of the main vessel opposite the defect; and

one or more apertures defined by the tubular member, each of the one or more apertures being alignable with at least one of the one or more branch vessels and having an area greater than the opening of the respective at least one branch vessel when the tubular member is positioned against the wall of the main vessel.

Please add new claims 25-38 as follows:

25. The stent-graft of claim 1, wherein at least one of the renal apertures is elongated in a circumferential direction.

26. The stent-graft of claim 1, wherein the stent system includes one or more supporting portions each attached to the graft material surrounding the perimeter of a respective one of the one or more apertures.

27. The stent-graft of claim 1, wherein the stent system is formed from a shape memory alloy having an AF temperature of 37°C or less.

28. The stent-graft of claim 1, wherein the stent system is formed from a shape memory alloy having an AF temperature greater than 37°C and an MS temperature less than 37 °C.

29. The process of claim 19, wherein the main vessel is an aorta and the defect is an aneurysm.

30. The process of claim 21, wherein aligning includes using three-dimensional imaging.

31. The process of claim 21, wherein aligning the graft includes partially expanding the graft and rotating the graft, while partially expanded, about its longitudinal axis to align the one or more apertures of the graft with the one or more branch vessels, the apertures being defined in a sidewall of the graft.

32. The process of claim 22, wherein aligning includes using three-dimensional imaging.

33. The process of claim 22, wherein aligning the graft includes partially expanding the graft and rotating the graft, while partially expanded, about its longitudinal axis to align the one or more apertures of the graft with the one or more branch vessels, the apertures being defined in a sidewall of the graft.

34. The process of claim 23, wherein the main vessel is an aorta and the one or more branch vessels include a renal artery.

35. A stent-graft for bridging an aneurysm in an aorta, the aneurysm being at least partially disposed between two renal arteries and two iliac arteries, comprising:

a graft material defining at least one renal aperture oriented to align with one of the two renal arteries when the stent-graft is in an expanded state; and

a stent system for supporting the graft material in a contracted state wherein each renal aperture is contracted and the expanded state wherein each renal aperture is expanded.